

United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,663	01/28/2000	Douglas P. Do	M4065.0225/p225	2516
24998	7590 04/22/2004		EXAMI	NER
2.0	N SHAPIRO MORIN &	BALI, VIK	BALI, VIKKRAM	
	2101 L STREET NW WASHINGTON, DC 20037-1526		ART UNIT	PAPER NUMBER
			2623	12
			DATE MAILED: 04/22/2004	15

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)				
	09/493,663	DO, DOUGLAS D.				
Office Action Summary	Examiner	Art Unit				
	Vikkram Bali	2623				
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR RITHE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by some and the period for reply will, by some and the period for reply will, by some and patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a repl n. a reply within the statutory minimum of thirty (3 eriod will apply and will expire SIX (6) MONTH statute, cause the application to become ABAN	y be timely filed 30) days will be considered timely. IS from the mailing date of this communication. IDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	12 February 2004.					
2a)⊠ This action is FINAL . 2b)□	<u>_</u>					
. —	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-39 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-39 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction a	ndrawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exar	miner.					
10) The drawing(s) filed on is/are: a) □	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to	the drawing(s) be held in abeyance	e. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the co	,	• • • • • • • • • • • • • • • • • • • •				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in App priority documents have been re ureau (PCT Rule 17.2(a)).	lication No ceived in this National Stage				
Attachment(s)						
1)	4) Interview Sum Paper No(s)/N	nmary (PTO-413) /ail Date				
Information Disclosure Statement(s) (PTO-1449 or PTO/SE Paper No(s)/Mail Date		mal Patent Application (PTO-152)				

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DETAILED ACTION

In response to the amendment filled 2/12/2004 all the amendments to the claims have been entered and the action follows:

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Addiego in view of Levy et al (US 4579455).

With respect to claims 1-39, the rejections are maintained and incorporated by references as set forth in the prior office action paper # 11. Furthermore, Addiego also discloses the desired images, (see col. 8, lines 58-65, the images are the one that are to be inspected) as claimed.

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Response to Arguments

3. Applicant's arguments filed 2/12/2004 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Addiego discloses a wafer inspection system that scans the wafer into plurality of images corresponding to the respective areas select two of the plurality of areas (see figure 2A, scanning of the wafer, see col. 5, lines 35-40, and figure 7, that shows the wafer 14 with the plurality of dies i.e. plurality of images, and the two adjacent images are selected for the evaluation, see col. 10 for the description); deriving a spatial relation between the selected images, and forming the pattern to be recognized (see col. 8, lines 59-68, the inspection system acquire the image of the wafer, select the two images, the two images are adjacent "spatial relationship between the two selected images" and then subtract the two images to get the pattern i.e. the defect that gets classified i.e. "to be recognized"). Levy teaches that the inspection instruction can be incorporated into

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skill in the art.

microprocessor via a tape cassette or well by manual controls "based on an input by a user of the inspection apparatus" (see col. 5, lines 51-58) as claimed.

It would have been obvious to one ordinary skilled in the art at the time of invention to simply use the feature as disclosed by the Levy of selecting the images using the windows in to the Addiego's inspection system in order to provide a improved defect detection method by reducing undetected defects and reducing false detected defects.

And, the motivation comes from the knowledge generally available to one of ordinary

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikkram Bali whose telephone number is 703.305.4510. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703.308.6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vikkram Bali Examiner Art Unit 2623

vb April 20, 2004

> SAMIR ALMED PRIMARY EXAMINER